



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,142	08/14/2006	Malcolm Mainland Sinclair	36290-0427-00-US (229830)	6816
23973 7590 04/13/2010 DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE, SUITE 2000 PHILADELPHIA, PA 19103-6996			EXAMINER ANDLER, MICHAEL S	
			ART UNIT 2876	PAPER NUMBER
			NOTIFICATION DATE 04/13/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DBRIPDocket@dbr.com
penelope.mongelluzzo@dbr.com

Office Action Summary	Application No. 10/589,142	Applicant(s) SINCLAIR ET AL.	
	Examiner Michael Andler	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The examiner acknowledges and has entered the amendment/arguments filed on 21 January 2010. Claims **16-36** are currently pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

a) Claims **31-36**, drawn to a detector, and related method claims **16-30** are rejected under 35 U.S.C. 102(b) as being anticipated by Kaish et al. (US 5,974,150).

Regarding claims **16-22, 27-29 and 31**, Kaish et al. discloses a detector for verifying that a plurality of objects is genuine (See Abstract), the object comprising:

a primary identifier in the form of a plurality of identification elements embedded in the object (Fig 1, item 3), the identification elements being detectable when illuminated by electromagnetic radiation selected from the group consisting of infrared and ultraviolet (Col 19, lines 18-23),

but being indistinguishable from the rest of the object when illuminated with visible light (Col 13, line 1), the identification elements being randomly distributed so that the positions of the identification elements are unique to the object (Col 13, lines 11-20), and

the object further comprising a reference point in the form a printed symbol (See Fig 1, item 4 and Col 22, lines 38-46),

Art Unit: 2876

the detector comprising (Fig 2 and 3):

a source of electromagnetic radiation selected from the group consisting of infrared and ultraviolet wherein the identification elements are fluorescent (Col 19, lines 18-23);

a camera (Fig 2, item 35-36 and Fig 3, item 44);

image analysis equipment for converting an image made by the camera into alphanumeric code (See Fig 2, item 20; Fig 3, item 45; and Fig 4A, step 104 where any encrypted data in digital form can be considered an alphanumeric code);

a database into which the alphanumeric code can be recorded and from which codes relating to other recorded camera images can be retrieved (See Col 25, lines 1-5 and Fig 4A, step 107); and

processing equipment adapted to compare the alphanumeric code relating to the object being verified with the other codes already stored in the database relating to recorded camera images (See Fig 4B, step 115 and Col 25, lines 42-49);

wherein the detector is adapted to identify a sub-area of the object defined by the reference point and to record unique alphanumeric information relating to the positions of the identification elements in the sub-area relative to the reference point (See Fig 1, item 4; Col 22, lines 38-46; and Col 23, lines 41-42).

Regarding claim **32**, Kaish et al. discloses wherein the detector is adapted to detect the location of the reference point on the object and to direct the camera to this part of the object (Col 18, lines 2-5).

Regarding claim **33**, Kaish et al. discloses wherein the detector is adapted to detect the location of the reference point on the object and to direct the image analysis equipment to a corresponding part of the image (Col 18, lines 2-7).

Regarding claim **34**, Kaish et al. discloses wherein the source of electromagnetic radiation comprises a source of ultraviolet light (Col 19, lines 18-23).

Regarding claims **24-26 and 36**, Kaish et al. discloses wherein the detector is adapted to recognize and record information relating to a unique secondary identifier (See, for example, Fig 1, items 8-10), and

processing equipment is adapted to compare the code relating to the object to be verified only to codes relating to recorded objects that have the same identifier (See Fig 1, items 8-10 and Col 22, lines 31-46 where the scanned pattern is compared to the message encoded in the MICR text, bar code and glyph pattern).

Regarding claim **23**, Kaish et al. discloses wherein corresponding numbers in each alphanumeric code are compared to within a specified tolerance level (Col 9, lines 51-56).

Regarding claim **30**, Kaish et al. discloses wherein the genuine object comprises paper, and includes adding the identification elements to the paper during the paper-making process (Col 19, line 55).

Regarding claim **35**, Kaish et al. discloses wherein the image analysis equipment is adapted to divide the camera image into a plurality of sub-regions and to count the number of pixels illuminated in each sub-region to produce a code corresponding to the camera image (See Fig 2, items 35-36; Fig 3, item 44; and Col 24, lines 10-36 where

Art Unit: 2876

scanned rows, columns, and lines of a CCD or scanner can be considered sub-regions of the image).

Response to Arguments

3. Regarding claim **16** and its respective dependent claims, applicant has argued that the previously cited prior art reference of Kaish et al. (US 5,974,150) does not disclose that the embedded fluorescent fibers are detected by illumination from an ultraviolet or infrared source and has further argued that the embedded fluorescent fibers are indistinguishable from the rest of the object when illuminated with visible light. Applicant's arguments with respect to claim **16** and its dependent claims have been fully considered but are not persuasive.

Regarding the argument that the embedded fluorescent fibers taught by Kaish et al. are not detected by illumination from an ultraviolet or infrared source, the examiner respectfully disagrees and would point out to the applicant that Kaish et al. teaches that "known dyes may be used, for example organic fluorescent dyes that have absorption and emission in the infrared to near-ultraviolet range" (Col 21, lines 51-53) and further teaches that "radiation from a source 39, such as a laser beam, flashlamp, or light emitting diode at the absorption maxima of the dye is expanded and focused on the label 40 (and) fluorescent radiation emitted by the fibers is collected by a lens 38" (Col 23, lines 27-31). Therefore, Kaish et al. clearly teaches this limitation.

Regarding the argument that the embedded fluorescent fibers are indistinguishable from the rest of the object when illuminated with visible light, the examiner respectfully disagrees and would point out that Kaish et al. specifically

Art Unit: 2876

teaches that embedded fluorescent fibers are indistinguishable from normal fibers in a label since a photocopier detects normal fibers but detection of fluorescent fibers in the label requires "the scanner to properly illuminate the fibers to cause them to fluoresce" (Col 3, lines 10-12) where the illumination source is selected based on the properties of the fluorescent dye as argued above. Furthermore, the examiner would respectfully point out that the language of the claim merely requires that the identification elements are "indistinguishable from the rest of the object when illuminated with visible light" but does not specify the means for determining that the elements are "indistinguishable". Applicant has argued that the fluorescent fibers of Kaish et al. are visible when viewed, however, this limitation is not recited in the language of the claim. The examiner takes the stance that, when illuminated with visible light, a fiber without fluorescent properties and a fluorescent fiber would be indistinguishable at least to a detector that is sensitive to infrared or ultraviolet emissions from a fluorescent source as taught by Kaish et al. (See Col 22, lines 47-50).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2876

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Andler whose telephone number is (571) 270-5385 and whose e-mail address is michael.andler@uspto.gov. The examiner can normally be reached on Monday-Friday 7:30 AM to 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Andler/
Examiner, Art Unit 2876

/Michael G Lee/
Supervisory Patent Examiner, Art Unit 2876